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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,845	12/14/2001	David Kloper	PD-200372	7445
7590	06/14/2005			EXAMINER HOM, SHICK C
Hughes Electronics Corporation Patent Docket Administration Bldg. 1, Mail Stop A109 P.O. Box 956 El Segundo, CA 90245-0956			ART UNIT 2666	PAPER NUMBER
DATE MAILED: 06/14/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

8m

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/016,845	KLOPER, DAVID
	<b>Examiner</b>	<b>Art Unit</b>
	Shick C. Hom	2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 14 December 2001.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-42 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ .   | 6) <input type="checkbox"/> Other: _____ .                                  |

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**DETAILED ACTION**

***Specification***

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Objections***

2. Claims 2-7, 9-14, 16-21, 23-28, 30-35, and 37-42 are objected to because of the following informalities: in claims 2-7, 9-14, 16-21, 23-28, 30-35, and 37-42 line 1 delete "A method," "An apparatus," "A computer-readable medium," "A method," "A computer-readable medium," and "A system," and insert ---The method---, ---The apparatus---, ---The computer-readable medium---, ---The method---, ---The computer-readable medium---, and ---The system---, respectively, because they're reciting the method, apparatus, computer-readable medium, method, computer-readable medium, and system of base claims 1, 8, 15, 22, 29, and 26. Appropriate correction is required.

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***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3-4, 8, 11, 15, 17-18, 22, 25, 29, 32, 36, and 38-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Pratt (6,664,921).

Regarding claims 1, 8, 15, 22, 29, 36:

Pratt discloses a method for ranging in a radio frequency communications system, the method comprising: selecting a transmission channel class that includes at least one of transmission rate, modulation scheme, coding scheme, and transponder footprint; transmitting a ranging message according to the selected transmission channel class over a channel (see col. 2 lines 28-41 which recite the step of selecting the ranging signals having the greatest amplitude based upon the modulation of the ranging signals received clearly anticipate

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the step of selecting transmission channel class wherein the class being the modulation scheme and the step of transmitting a ranging message according to the modulation scheme); and selectively modifying the transmission channel class based upon characteristics of the channel (see col. 3 lines 1-11 which recite the step of selecting signals from a particular direction due to unwanted reflections or other sources of interference based on the ranging signals clearly reads on the step of selectively modifying the transmission channel class based upon the characteristics of the channel wherein the class is the transponder footprint due to the direction of the signals).

Regarding claims 3, 4, 11, 17-18, 25, 32, 38-39:

Pratt discloses wherein the transmitting step and the modifying step are iteratively performed to achieve an improved transmission class and wherein the modifying step is performed periodically in response to a change in the characteristics of the channel (see col. 2 lines 28-41 which recite the step of selecting the ranging signals being performed periodically to the changing conditions and the abstract which recite the use of the range estimate to improve accuracy in difficult reception conditions clearly reads on step to achieve an improved transmission class and in response to a change in the characteristics of the channel).

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**Claim Rejections - 35 USC § 103**

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 5-6, 10, 12-13, 19-20, 24, 26-27, 31, 33-34, and 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pratt (6,664,921) in view of Enns et al. (2003/0161263).

For claims 5, 10, 12, 19, 24, 26, 31, 33, and 40, Pratt discloses the system and method described in paragraph 4 of this office action. Pratt discloses all the subject matter of the claimed invention with the exception of wherein the transmission rate is increased to a value that is sustainable by the channel as in claims 10, 24, 31, and wherein the radio frequency communications system includes a satellite configured to support two-way communication as in claims 5, 12, 19, 26, 33, 40.

Regarding claims 6, 13, 20, 27, 34, 41:

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Pratt discloses the method further comprising: receiving a request to perform re-ranging based upon re-ranging criteria that includes at least one of location of the satellite, and the characteristics of the channel (see col. 2 lines 28-41 which recite the ranging being performed periodically to the changing conditions when a motor vehicle passes through a built-up area clearly reads on request to perform re-ranging, i.e. as determined by a time period, and clearly anticipate re-ranging based upon location of the satellite, i.e. the location of the satellite with respect to the moving motor vehicle and the characteristics of the channel).

Enns et al. from the same or similar fields of endeavor teach that it is known to provide wherein the transmission rate is increased to a value that is sustainable by the channel (see paragraph 0018 which recite accelerating the sessions to a maximum rate for each transmission) as in claims 10, 24, 31; and wherein the radio frequency communications system includes a satellite configured to support two-way communication (in Fig. 1 see the two-way communication to the satellite) as in claims 5, 12, 19, 26, 33, 40. Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide wherein the transmission rate is increased to a value that is sustainable by the channel and

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wherein the radio frequency communications system includes a satellite configured to support two-way communication as taught by Enns et al. in the communications method and apparatus of Pratt. The transmission rate being increased to a value that is sustainable by the channel and wherein the radio frequency communications system includes a satellite configured to support two-way communication can be implemented by connecting the processor for accelerating the session and the two-way communication link to the satellite of Enns et al. into the transmission circuit and system, respectively, of Pratt. The motivation for using the processor for accelerating the session and wherein the radio frequency communications system includes a satellite configured to support two-way communication as taught by Enns et al. in the communication method and apparatus of Pratt being that it provides more efficiency for the system since the system can accelerate the transmission rate of selected communication sessions using the processor and the added feature of two-way communication to the satellite.

7. Claims 2, 7, 9, 14, 16, 21, 23, 28, 30, 35, 37, 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pratt (6,664,921) in view of Parmenter (6,615,052).

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For claims 2, 7, 9, 14, 16, 21, 23, 28, 30, 35, 37, 42, Pratt discloses the system and method described in paragraph 4 of this office action. Pratt discloses all the subject matter of the claimed invention with the exception of storing parameters associated with the transmission of the message over the channel, the parameters including at least one of power information and timing information associated with the transmission of the message and altering the transmission channel class for load balancing.

Parmenter from the same or similar fields of endeavor teach that it is known to provide the step of storing parameters associated with the transmission of the message over the channel, the parameters including at least one of power information and timing information associated with the transmission of the message and altering the transmission channel class for load balancing (see abstract which recite the used of pre-stored power parameters for the active transmission channel to adjust the output power and col. 5 lines 44-65 which recite adjusting the loading to achieve a predetermined minimum BER). Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide the step of storing parameters associated with the transmission of the message over the channel, the parameters

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including at least one of power information and timing information associated with the transmission of the message and altering the transmission channel class for load balancing as taught by Parmenter in the communications method and apparatus of Pratt. The step of storing parameters associated with the transmission of the message over the channel, the parameters including at least one of power information and timing information associated with the transmission of the message and altering the transmission channel class for load balancing can be implemented by connecting the means for power control including the pre-stored power parameters and predetermined minimum BER of Parmenter into the transmitter of Pratt. The motivation for providing means for power control and load balancing as taught by Parmenter in the communication method and apparatus of Pratt being that it provides more efficiency for the system since the system can control the transmission power to achieve predetermined minimum error rate at the receiving end.

#### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Millman discloses optimized integrated high capacity digital satellite trunking network.

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Mahesh et al. disclose dynamic modulation of modulation profiles for communication channels in an access network.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C. Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Monday to Friday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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